

Michael C. Schlachter, CFA
Managing Director

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Mr. Mark Anson Chief Investment Officer California Public Employees' Retirement System 400 P Street, Suite 3492 Sacramento, CA 95814

Re: Relaxation of Long-Only Constraint for Domestic Equity Managers

Dear Mark,

You had requested Wilshire's opinion regarding Staff's proposal to relax the long-only constraint for some domestic equity managers. Wilshire supports the exploration of Staff's proposal, but wants to ensure that the Investment Committee fully appreciates the differences between long-only and long-short investing, and understands the impact of this potential change.

Background

In concept, we agree with Staff's proposed relaxation of the long-only constraint for some managers. Long-only investing disregards half the information available to active or enhanced managers, since the managers are unable to profit from information that leads them to believe that the value of certain stocks will fall. In a long-only framework, the sole way for a manager to profit from such information is simply to exclude or underweight predicted underperformers, thus avoiding the drag on the total portfolio that their relatively lower performance would cause.

Removing the long-only constraint allows managers to profit in two ways. First, managers can add absolute value through selling short stocks that are expected to decline in price. As poor performing stocks fall, the benefit to the portfolio is direct and linear. Second, managers can offset a good stock with a similar poor stock, reaping the rewards of the relatively different performances of both stocks. For example, if a manager expects auto manufacturer A to outperform auto manufacturer B over the next year, buying shares in A and selling short the equivalent value of B enables the manager to add value, *regardless of the overall market movement*. As long as A rises faster than B, or, in a down market, falls slower than B, the manager is able to add value due to the difference in price movement. As a result of the potential in this type of investment strategy, it is employed by more than 6,000 hedge funds.

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As with most of the investment world, however, there is no free lunch in this strategy. In exchange for the potential of higher returns, the removal of the long-only constraint also increases the risk in the portfolio and the magnitude of possible losses. In the example above, a long-only manager who was wrong about company A stands to lose only the decline in the value of A. On the other hand, the "long-short" manager ("long-short" is the nickname for managers who employ both long and short investment strategies in the same portfolio) will lose money as A falls and will lose additional money as B rises, doubling the loss in the portfolio.

The strategy proposed by Staff will allow the managers to buy long up to 135% of the portfolio's nominal value, and to sell short up to 35% of the nominal value. Overall, this will result in a 100% net exposure to market movements which should ideally allow the manager to have market-following returns yet moderately capitalize on negative information by adding additional alpha to the portfolio. If the overall market is up 8% in a year, the manager's portfolio should still track that 8% movement, plus or minus the manager's stock selection abilities. However, given the 135/35 long/short nature of the portfolio, the "tracking error" in the portfolio could increase to as much as 170% of its long-only level, all else being held equal. Therefore, a long-only manager with 5% tracking error will have a new tracking error of 8.5% when it is allowed the extra 35% long and short.

To mitigate this increase in risk, we understand that Staff will seek to hire managers who have lower long-only tracking error than is typical for CalPERS managers, resulting in an acceptable level of total tracking error once the long-only constraint is removed. However, the Investment Committee needs to be fully aware that the relaxation of the long-only constraint can result in greater tracking error than they are accustomed to in comparable traditional equity investments and potentially greater losses for the managers concerned. Although the Investment Committee has previously allowed short investing in the RM ARS and Currency Overlay programs, this will be the first time that short sales have been allowed in the external equity portfolio.

Implementation

Selecting managers who will be allowed to relax the long-only constraint is far more difficult than simply picking the best "stock pickers". The process of selling securities short requires experienced traders who understand the exchanges' rules about when and how short sales can be executed. In addition, short positions will require the payment of embedded financing rates (including dividends) while the positions are in place. Although a long investor can wait indefinitely for a stock to rise in value, there are explicit costs to holding a short position that is not performing as expected. Managers need to have a clear plan for managing these technical factors.

There are also two risks unique to short selling which need to be fully understood by the short investor. First, the risk/return payoff of a short sale is different from a long purchase. When one buys a stock, the worst outcome is that the stock falls to zero and

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the buyer loses 100% of invested capital. The best outcome is that the stock rises quickly and tremendously, resulting in a selling price that is multiples of purchase price. For a short seller, the return/risk profile is exactly the opposite. A stock sold short can fall to zero, at best, giving the investor a maximum of a 100% return. However, if the stock skyrockets (due to a takeover announcement, drug patent, major new client, or some other shock to the expected business model) the investor could be forced to buy the stock back ("cover" the short sale) at multiples of the original sale price. Hence, short sellers need to be aware of the potential in their portfolios for such unpredictable events that can cause losses in excess of 100%, and have controls in place to guard against these risks.

The other unique risk to short sellers is known as a "short squeeze". When a stock has a very large total short position in the marketplace relative to its market capitalization, the price can unpredictably race higher. If the stock price moves upward for any of a number of reasons, short sellers may choose to "cover" their positions by buying the shares back and closing out their short positions. As more and more short sellers buy back the shares, the demand makes the price climb ever higher, potentially forcing other short sellers to buy, as well, either as a result of margin calls by brokers or simple risk management. In the worst cases, this can result in a stampede of buyers, known as a "short squeeze", which may cause large losses very quickly. Obviously, it is possible for any stock in a long portfolio to fall rapidly and cause similar losses, but such falls are usually as a result of market news, commodity prices, interest rates, or fundamental changes in the company's business. In contrast, the short squeeze is a completely "technical" effect that can occur unpredictably in the absence of any specific change to company fundamentals.

While none of these concerns and risks would lead us to recommend against the idea of relaxing the long-only constraint, we wish to make it very clear that Staff's pursuit of this change will require a great deal of due diligence in selecting managers in the implementation phase, and would expose CalPERS to sources of risk and return that are significantly different from what it has experienced in the past in the external equity program. Managers selected for the removal of the long-only constraint need to be able to demonstrate significant experience and ability in short investing, and must have the additional risk management systems in place to mitigate the potential damage that short selling can cause in their portfolios.

Sincerely,

Michael C. Schlachter, CFA